

# Claims

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1. A method for dynamically selecting a firewall server (603) for a web client (601), in particular a web browser (601), in a Transmission Control Protocol/Internet Protocol (TCP/IP) network comprising a plurality of firewall servers (503), said method comprising the steps of :
    - measuring performance and availability of each firewall server (603) using measurement probes (607);
    - dynamically selecting a firewall server according to the performance and availability measurements (607).
  2. The method according to the preceding claim wherein the step of measuring the performance and availability of each firewall server (603) using measurement probes (607) comprises the further step of:
    - measuring the response time needed for retrieving from a web server (605) known information, in particular one or a plurality of known web pages, through each firewall server (603);
  3. The method according to the preceding claim wherein the step of measuring the response time comprises the further steps of:
    - establishing (402) a connection with the web server (605) through each firewall server (603);

- retrieving (403) the one or a plurality of known web pages from the web server (605);
- checking (405) that the retrieved one or plurality of web pages contain one or a plurality of known keywords.

5 4. The method according to any one of the preceding claims wherein the step of measuring the performance of each firewall server (603) using measurement probes (607) comprises the further step of:

- comparing for each firewall server said measured response time with previous measured response times;
- determining for each firewall (603) the degradation or the amelioration of the measured response time.

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15 5. The method according to any one of the preceding claims wherein the step of measuring the availability of each firewall server using measurement probes (607) comprises the further step of:

- detecting failures on each firewall server;
- excluding firewall servers in failure from the step of selecting a firewall server.

20 6. The method according to any one of the preceding claims wherein said firewall server (603) is a proxy server (304) or/and a socks server (311).

7. The method according to any one of the preceding claims comprising the further steps of:

- processing performance and availability measurements (607) from a single universal resource locator (URL) system (606);
- dynamically creating a configuration file based on the performance and availability measurements, preferably in Javascript language, on said universal resource locator (URL) system (606) for selecting said firewall server (603).

8. The method according to any one of the preceding claims wherein the step of dynamically creating a configuration file is processed by a common gateway interface (CGI) (608) on said universal resource locator (URL) system (606).

9. The method according to any one of the preceding claims wherein the step of selecting a firewall server (603) comprises the further step of:

- downloading the configuration file from the universal resource locator (URL) system (606) to the web client, in particular to the web browser (601).

10. The method according to any one of the preceding claims wherein the steps of measuring performance and availability and of dynamically selecting a firewall server (603) are periodically processed in the universal resource locator (URL) system (606) and the configuration

file created by the common gateway interface (608) (CGI) is periodically downloaded to the web client (601).

11. The method according to any one of the preceding claims comprising the further steps of:

- pre-selecting a backup firewall server (603) in a background process;
- switching to said backup firewall server in case of failure of the selected firewall server.

12. The method according to any one of the preceding claims wherein step of selecting a firewall server according to performance and availability measurements comprises the further step of:

- selecting the firewall server according to the Internet Protocol (IP) address.

13. A system comprising means adapted for carrying out the method according to any one of the preceding claims.